WHAT IS CLAIMED IS:

- 1. A semiconductor apparatus comprising a semiconductor device, an electrically insulating layer having an inclined portion and formed on said semiconductor device by printing an electrically insulating material by use of a mask, an external connection terminal formed on said electrically insulating layer, and wiring formed on said electrically insulating layer, and wiring formed on said electrically connecting said external connection terminal with a circuit electrode of said semiconductor device.
- 2. A semiconductor apparatus according to Claim
 1, wherein said electrically insulating layer has
 particles.
- A semiconductor apparatus comprising a semiconductor device; an electrically insulating layer containing particles, having an inclined portion and formed on said semiconductor device; an external connection terminal formed on said electrically insulating layer; and wiring formed on said electrically connecting insulating layer for electrically connecting said external connection terminal with a circuit electrode of said semiconductor device.
- 4. A semiconductor apparatus according to Claim 2 or 3, wherein said particles are made of the same material as said electrically insulating material of said electrically insulating layer.
- 5. A semiconductor apparatus according to Claim

- 2 or 3, wherein said particles contained in said electrically insulating layer are formed so that a size of said particles near said semiconductor device is larger than a size of said particles near said external connection terminal.
- 6. A semiconductor apparatus according to Claim 2 or 3, wherein a size of said particles is not larger than 10 micrometers.
- 7. A semiconductor apparatus according to Claim 1 or 3, wherein a lump portion is provided in a vicinity of a boundary between said inclined portion of said electrically insulating layer and a flat portion of said electrically insulating layer having an approximately uniform thickness.
- 8. A semiconductor apparatus according to Claim 1 or 3, wherein a thickness of said electrically insulating layer is in a range of from about 35 to about 150 micrometers.
- 9. A semiconductor apparatus according to Claim
 1 or 3, wherein a thickness of said electrically
 insulating layer is in a range of from 1/20 to 1/5 as
 large as thickness of said semiconductor device.
- 10. A semiconductor apparatus according to Claim
 1 or 3, wherein the inclined portion of said
 electrically insulating layer is inclined at a gradient
 in a range of from about 5% to about 30% with respect
 to a circuit surface of said semiconductor device.
- 11. A semiconductor apparatus according to Claim

1 or 3, wherein an elastic modulus of said electrically insulating layer is in a range of from about 0.1 GPa to about 10 GPa.

- 12. A semiconductor apparatus according to Claim 1 or 3, wherein said electrically insulating layer is made of a material curable at a temperature in a range of from about 100% to about 250%.
- 13. A semiconductor apparatus according to Claim 1 or 3, wherein a glass degradation temperature of said electrically insulating layer is in a range of from 150% to 400%.
- 14. A semiconductor apparatus according to Claim 1 or 3, wherein a heat degradation temperature of said electrically insulating layer is in a range of from 300% to 450%.
- 15. A semiconductor apparatus comprising a semiconductor device, an electrically insulating layer formed on said semiconductor device, and a wiring formed on said electrically insulating layer and provided for electrically connecting an external connection terminal formed on said electrically insulating layer with a circuit electrode of said semiconductor device, wherein:
- a glass transition temperature of said electrically insulating layer is in a range of from 150% to 400%; and

a heat degradation temperature of said electrically insulating layer is in a range of from

300°C to 450°C.

- 16. A semiconductor apparatus according to Claim 1 or 3, wherein said electrically insulating layer is made of at least one member selected from the group consisting of polyimide, polyamide, polyamide-imide, epoxy, phenol, and silicone.
- 17. A semiconductor apparatus according to Claim
 1 or 3, wherein said electrically insulating layer has
 characteristic which varies in accordance with a
 direction of thickness thereof so that the
 characteristic of said electrically insulating layer at
 a semiconductor device side is near characteristic of
 said semiconductor device and the characteristic of an
 external connection terminal-side portion of said
 electrically insulating layer is near the
 characteristic of a substrate on which said
 semiconductor device is mounted.
- 18. A semiconductor apparatus according to Claim
 1 or 3, wherein said electrically insulating layer has
 characteristic which changes in accordance with a
 direction of thickness thereof so that thermal
 expansion coefficient of said electrically insulating
 layer decreases as a position of said electrically
 insulating layer goes from said external connection
 terminal toward said semiconductor device.
- 19. A method for producing a semiconductor apparatus comprising a step of forming an electrically insulating layer on a wafer by printing by use of a

mask.

20. A method for producing a semiconductor apparatus comprising:

a first step of forming an electrically insulating layer on a wafer by printing by use of a mask;

a second step of forming a wiring over an area from a circuit electrode of said wafer to an inclined portion and a flat portion of said electrically insulating layer; and

a third step of forming an external connection terminal on said electrically insulating layer so that said external connection terminal is electrically connected with said circuit electrode through said wiring.

21. A method for producing a semiconductor apparatus comprising:

a first step of forming an electrically insulating layer on a wafer by printing by use of a mask;

a second step of forming a pad on said electrically insulating layer;

a third step of forming a wiring on said electrically insulating layer so that said wiring electrically connects a circuit electrode of said wafer with said pad; and

a fourth step of forming an external connection terminal on said pad.

- 22. A method for producing a semiconductor apparatus according to any one of Claims 19 through 21, wherein said electrically insulating layer contains particles.
- 23. A method for producing a semiconductor apparatus according to any one of Claims 19 through 21, wherein said electrically insulating layer is formed by repeating printing by a plurality of times by use of said mask.
- 24. A method for producing a semiconductor apparatus according to any one of Claims 19 through 21, wherein said first step of forming said electrically insulating layer by printing is performed in a manner so that a squeegee is moved over an opening portion of said mask from a vertex to an opposite vertex.

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